

This listing of claims will replace all prior versions of claims in the application.

Listing of Claims: Please amend the claims as follows:

We claim:

Claim 1. (Cancelled)

Claim 2. (Cancelled)

Claim 3. (Cancelled)

Claim 4. (Cancelled)

Claim 5. (Cancelled)

Claim 6. (Currently Amended) ~~The polypeptide variant rPhl p 1-A236C according to claim 1 which comprises~~ A polypeptide variant of major allergen Phl p 1 from timothy grass which comprises an additional Cys residue compared to the wild type Phl p 1 sequence, said polypeptide variant comprising a polypeptide sequence set forth in SEQ ID NO: 2, wherein the additional Cys residue has been introduced by exchange of Ala 236.

Claim 7. (Withdrawn) DNA molecule which encodes for an allergen variant according to claim 1.

Claim 8. (Withdrawn) DNA molecule according to SEQ ID NO 1 which encodes for the allergen variant according to Claim 6.

Claim 9. (Withdrawn, Currently Amended) A process for the preparation of a polypeptide variant of ~~recombinant~~ major allergen Phl p 1 ~~rPhl p 1~~ according to claim ~~[[1]]~~ 6 comprising:

- (a) introducing a base triplet which encodes a Cys residue into a polynucleotide encoding said ~~rPhl p 1~~ wild-type Phl p 1 by ~~insertion or exchange, wherein said additional Cys residue is located in a higher position than amino acid position 230 compared with the wild type Phl p 1 polypeptide sequence of Ala 236;~~
- (b) introducing said polynucleotide of (a) into a host organism and culturing said host organism under sufficient conditions to allow expression of said polypeptide variant; and
- (c) purifying the polypeptide variant.

Claim 10. (Withdrawn, Currently Amended) A process for the preparation and purification

of a polypeptide variant of the ~~recombinant~~ major allergen Phl p 1 ~~rPhl p 1~~ in soluble form, comprising

obtaining an insoluble crude protein according to claim 9,
denaturing said insoluble crude protein

and

further renaturing said denatured crude protein.

Claim 11. (Withdrawn, Currently Amended) A process for the purification of a polypeptide variant of the ~~recombinant~~ major allergen Phl p 1 ~~rPhl p 1~~ according to Claim 9 in soluble form, comprising

employing a polynucleotide which encodes a fusion protein comprising a His-tag and said polypeptide variant of major ~~birch~~ allergen Phl p 1 ~~rPhl p 1~~,

expressing said His-tagged polypeptide in said host organism,

purifying said His-tagged polypeptide using two-stage metal ion chelate affinity chromatography and

removing said His tag to obtain said polypeptide variant of major ~~birch~~ allergen Phl p 1 ~~rPhl p 1~~ in soluble form.

Claim 12. (Currently Amended) The polypeptide variant of claim [[1]] 6 which exists in various fold forms.

Claim 13. (Currently Amended) A fold form rPhl p 1-LM of the polypeptide variant according to claim [[1]] 6, which is obtainable by:

- (a) overexpressing in a host organism, a fusion protein comprising the rPhl p 1 polypeptide variant and a His tag;
- (b) denaturing inclusion bodies isolated from the host organism using guanidinium chloride;
- (c) renaturing dissolved protein on a chelate affinity chromatography column;
- (d) removing the His tag;
- (e) employing gel filtration;
- (f) further purifying using chelate affinity chromatography;
- (g) isolating the target protein from the flow-through; and
- (h) further employing gel filtration.

Claim 14. (Currently Amended) A fold form rPhl p 1-HM of the ~~allergen~~ polypeptide variant

according to claim [[1]] 6, which is obtainable by:

- (a) overexpressing in a host organism, a fusion protein comprising the rPhl p 1 polypeptide variant and a His tag;
- (b) denaturing inclusion bodies isolated from the host organism using guanidinium chloride;
- (c) renaturing dissolved protein on a chelate affinity chromatography column;
- (d) removing the His tag;
- (e) employing gel filtration;
- (f) further purifying using chelate affinity chromatography;
- (g) eluting the target protein with an imidazole gradient; and
- (h) further employing gel filtration.

Claim 15. (Currently Amended) A vaccine which comprises the polypeptide variant according to claim [[1]] 6 and an acceptable carrier.

Claim 16. (Withdrawn, Currently Amended) A method for specific immunotherapy of an allergy triggered by major allergen Phl p 1 from timothy grass comprising administering to a subject in need thereof a polypeptide variant of claim [[1]] 6 or a pharmaceutical composition thereof.

Claim 17. (Currently Amended) A pharmaceutical composition comprising a polypeptide variant according to claim [[1]] 6 and a pharmaceutically acceptable carrier.

Claim 18. (Withdrawn, Currently Amended) A method for the *in vitro* diagnosis of an allergy which is triggered by major allergen Phl p 1 from timothy grass comprising administering to a subject in need thereof a polypeptide variant of claim [[1]] 6 or a pharmaceutical composition thereof.

Claim 19. (Withdrawn) Recombinant DNA expression vector containing a DNA molecule according to Claim 7 for the treatment of allergies in the triggering of which the major allergen Phl p 1 from timothy grass is involved, by immunotherapeutic DNA vaccination.

Claim 20. (Withdrawn) A method for the treatment of an allergy triggered by major allergen Phl p 1 from timothy grass comprising administering to a subject in need thereof an by immunotherapeutic vaccine of claim 15.

Claim 21. (Withdrawn)

Pharmaceutical composition comprising an expression vector according to Claim 19 and/or pharmaceutically usable derivatives thereof, including mixtures thereof in all ratios, and, if desired, excipients and/or adjuvants, for the treatment of allergies in the triggering of which the major allergen Phl p 1 from timothy grass is involved, by immunotherapeutic DNA vaccination.

Claim 22. (Cancelled)

Claim 23. (Currently Amended)

The polypeptide variant of major allergen Phl p 1 from timothy grass according to ~~claim 22~~ claim 6 which is

(a) a polypeptide which is encoded by a polynucleotide ~~comprising~~ consisting of the sequence set forth in SEQ ID NO: 1; or

(b) a polypeptide which ~~comprises~~ consists of the sequence set forth in SEQ ID NO: 2.